International Journal of Law Policy and Governance
Vol.1, No.2, 2022
pp. 60-68
e-ISSN: 2830-3245

DOI: https://doi.org/10.54099/ijlpg.v1i2.416

Smart Village Model In Improving Service Quality

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ARTICLE INFO

Research Paper

Article history:
Received: 5 October 2022
Revised: 7 December 2022
Accepted: 16 December 2022

Keywords: Smart Village Model, Service Quality,

ABSTRACT

A smart village concept can be used as a solution to overcome various problems that occur in the administration of village governance. The purpose of this research is to build a smart village system and find out the benefits of this system. The type of research in this research is descriptive qualitative and the data collection method used in this research is interviews and field observations. From interviews and field observations, demographic data and village economic potential were obtained. The result of this research is the establishment of a smart village model system to improve service quality. Several village problems have been resolved by the Berekah village government, namely up-to-date village demographic data, community economic potential, and other types of services. With this smart village application, the community is well served, without having to wait in long and long queues. The novelty of this smart village model is that it is easy for the community to make population files and other services, as well as demographic data and community economic potential that can be developed

INTRODUCTION

The rapid development of technology over the past few decades has given birth to a smart concept that is applied to various systems and arrangements in real life (Szalai et al., 2021; Vaishar & Šťastná, 2019). The significant impact of this technological development is the existence of information technology that is applied both in industry and government. The field of the information technology industry is very helpful in the collection, processing, storage, dissemination, presentation of information, and decision-making (Maja et al., 2020). Whereas in the field of government information technology is very helpful in the development and development of government from the center to village government, namely in terms of economy, education, and services (Nuraini et al., 2021). The application of technology in rural areas aims to improve the quality of village services to the community so that the community will be served well (Maharani & Kencono, 2021). As stated in (Law No.6 of 2014) which regulates the policy of using village funds, villages are required to provide the best service to the community and innovate to become Smart Villages.

The smart village concept itself is understood by experts as the integration of information technology in the lives of rural communities, resulting in sustainable benefits between information technology and rural communities (Shuldiner & Kortuem, 2020). A smart village concept can be used as a solution to overcome various problems that occur in the administration of village governance.

With this concept, it is not impossible if the village will emerge as a national economic power based on MSMEs, superior human resources, clean and transparent government, and a good social environment (Xu & Chiou, 2018; Zhang & Zhang, 2020). The application of the smart village concept will be implemented in a village that is ready to receive a computerized and automated data processing information system so that it can provide precise and accurate information (Atkočiuniene & Vaznoniene, 2019).

To improve services, especially related to administrative needs for the community and to overcome obstacles to the availability of population data, potential, and the community's economy. The Berakah Village Government, in one of its work programs, plans to build an information system (smart system). This system was built with the intention that the village government can provide improved administrative services online and can provide and display up-to-date digital data information related to information on population data, village potential, and economy. This smart village program is in line with the central government in developing smart villages.

With the existence of this smart village system, it is hoped that it will be able to overcome existing problems and convey all important information from the village government to all members of the community as well as all residents can easily submit various complaints, input, criticisms, and suggestions according to the field of complaints quickly without having to come to the village hall or meet village officials. The village government can find out what economic and tourism potential exists in its territory. This research aims to build a smart village system and find out the benefits of this system.

LITERATURE REVIEW

The smart village concept is a program that originates from (Law No.6 of 2014), namely requiring the creation of an independent and sustainable village by utilizing the village budget. The concept of a smart village, of course, must be seen from the side of the development of science and technology which is growing, and supported by it (Perpres No.95 of 2018) Presidential Regulation Number 95 of 2018 concerning electronic-based government systems. This program is a government innovation in utilizing technology to improve the quality of service to the public that is more transparent, accountable, and more effective, and efficient (Adesipo et al., 2020).

The village is at the forefront as a determinant of policy direction in the framework of national development. Thus the government has the responsibility to elevate rural areas to become points of acceleration in human, infrastructure, economic, cultural, and social development. A Smart village is a concept that adopts components and indicators of the concept of a smart city or smart city. However, this adoption is adapted to the problems that exist in rural areas so that the scale of implementation is smaller than in urban areas which aim to organize government and services in various fields by including technology in it. According to (Herdiana, 2019) There are three important elements in a smart village, namely smart government, smart community, and smart environment. Can be seen in the following image:

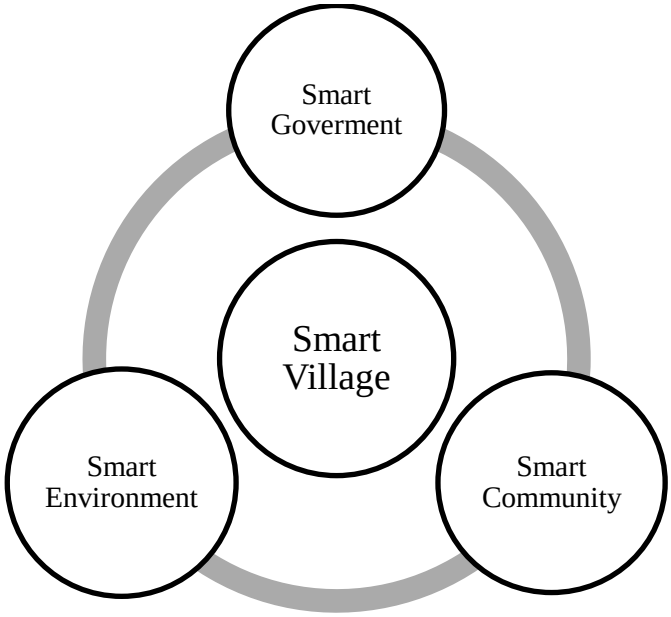

Figure 1. The Smart Village Concept

Smart Government is an ongoing concept or step that focuses on improving e-government services to improve government services in an effective, efficient, accountable, and transparent manner. Meanwhile, a smart community is a community and several groups within an area that has the potential to move toward technology. According to (Herdiana, 2019) smart environment is the use and way of overcoming social and environmental conditions based on information technology. A smart environment is an activity of exploiting the natural and social environment so that it is utilized into something useful and valuable by using information technology (Suwaryo, 2020). A village that has its characteristics is of course not only focused on its natural conditions but on all elements of community life, including the social, cultural, and economic potential that are developed simultaneously and in a structured manner (Bielska et al., 2021).

METHOD

The object of this research is the smart village model in improving services. This research was conducted in Berekah Village, Bojong Genteng District, Sukabumi Regency. The type of research used in this research is descriptive qualitative. Descriptive research according to (Sugiyono, 2020), is a research method used to determine the existence of the value of an independent variable, either one variable or more (independent) without making comparisons or connecting with other variables. While the qualitative approach according to Bogdan and Taylor is cited (Kusumastuti, Adhi; Khoiron, 2019), is a research procedure that produces descriptive data in the form of written or spoken words from people and observed behavior. Qualitative research focuses on social phenomena, giving voice to the feelings and perceptions of participants. Data collection methods used in this study are interviews and field observations. Interviews in qualitative research according to (Rachmawati, 2007) It is a conversation with a purpose and is preceded by some informal questions. And according to field observations (Arikunto, 2016) to collect data by making direct observation efforts to the place to be studied. The stages carried out in the smart village model research in improving this service are as follows:

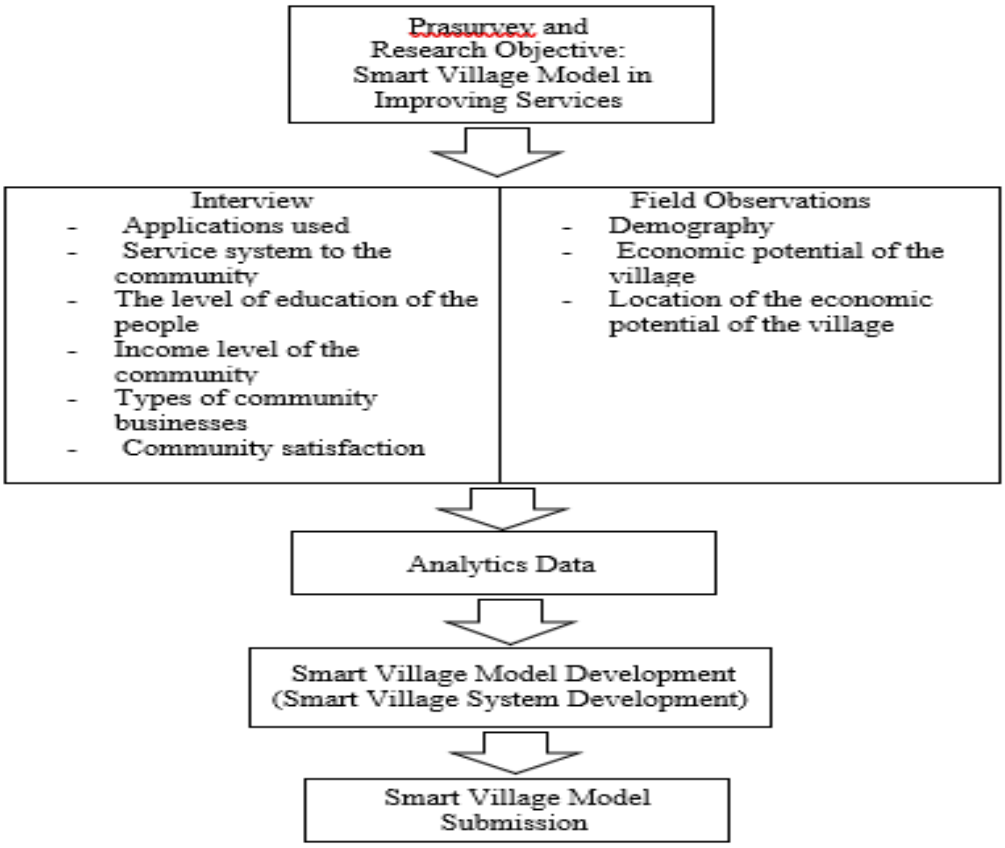

Figure 2. Research Stages (Source: Researchers, 2022)

RESULTS AND DISCUSSION

Implementation of the Smart Village Model in Berekah Village, Bojong Genteng District, Sukabumi Regency

There are three important elements in a smart village, namely smart government, smart community, and smart environment.

Smart Government

According to (Herdiana, 2019) smart government is a government that is smart, open, and participatory in administering government by implementing e-government, namely a government that utilizes smart village information technology. Smart government is a government administration by utilizing information technology and manifested into 4 village government functions, namely government administration, development implementation, community development, and empowerment (Popova & Zagulova, 2022). Based on the results of interviews and field observations conducted regarding the implementation of the smart village model, based on the elements of smart government it is concluded that the Berekah village government has carried out the smart government by creating activity programs by utilizing information technology to solve basic problems in Berekah village such as village applications and websites. as an electronic service, an e-KTP scan tool as an offline service without having to carry files, and other services. The use of technology in village government is to increase effectiveness and efficiency in services, information disclosure to the public, performance transparency, and transparency in the use of village funds.

SmartEnvironment

According to (Herdiana, 2019) Smart environment is a utilization and way of overcoming social and environmental conditions based on information technology. The smart environment is an activity of utilizing the natural and social environment so that it is utilized into something useful and valuable by using information technology according to Hasan (2021) in (Maulana, 2022).

Based on the results of interviews and field observations regarding the implementation of the smart village model based on smart environment elements, it was concluded that the Berekah Village Government had created a reading laboratory that was used by residents. The village government of Berekah also has a demographic of economic potential that can be developed. The existence of this program is a method of increasing village empowerment which can lift the economy of Berekah Village. In making this reading laboratory, it has been equipped with facilities that can make readers comfortable while reading. The community's enthusiasm was quite good, especially the students who always used the reading laboratory as a place to learn and play.

Smart Community

A smart community is a smart community in the sense that it can contribute to governance and village development by utilizing communication technology (Herdiana, 2019). Based on the results of interviews and field observations regarding the implementation of the smart village model, the Berekah village community has contributed to the implementation of the smart village model, namely in the form of support and participation in the implementation of the smart village model. With the use of information technology in the Berekah village government, it is hoped that it will become a government that is more transparent, open, and responsive and can motivate and direct the community. Based on the above expression, it can be stated that Berekah village in implementing the smart village program has included the community to contribute to developing the village. So that the implementation of the smart village model with smart community elements has been fulfilled.

Implementation of the Smart Village Model in Improving Services

In improving services to the community, the Berekah village government has created a program, namely the development of an information system (smart system), which is aimed at improving services to the community. To build this information system, the Berakah village government has collaborated with academics from the Muhammadiyah University of Sukabumi. The information system developed from the smart system is village potential, E-Government and demography, and a map of village potential and economy. The smart village model developed can be seen in the image below:

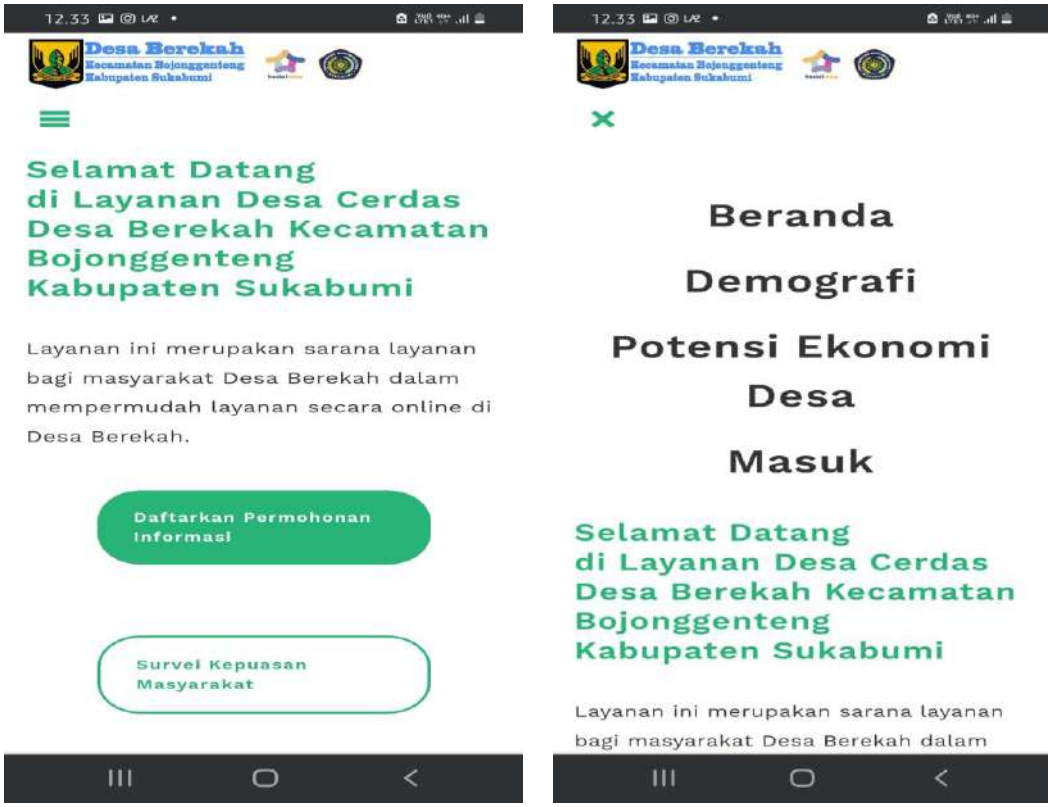

Figure 3. View of the Berekah Village Smart Village Dashboard

The picture above explains when the community enters the smart village application, it will go directly to the Berekah village dashboard. There are several service options so that people are not confused about the services needed.

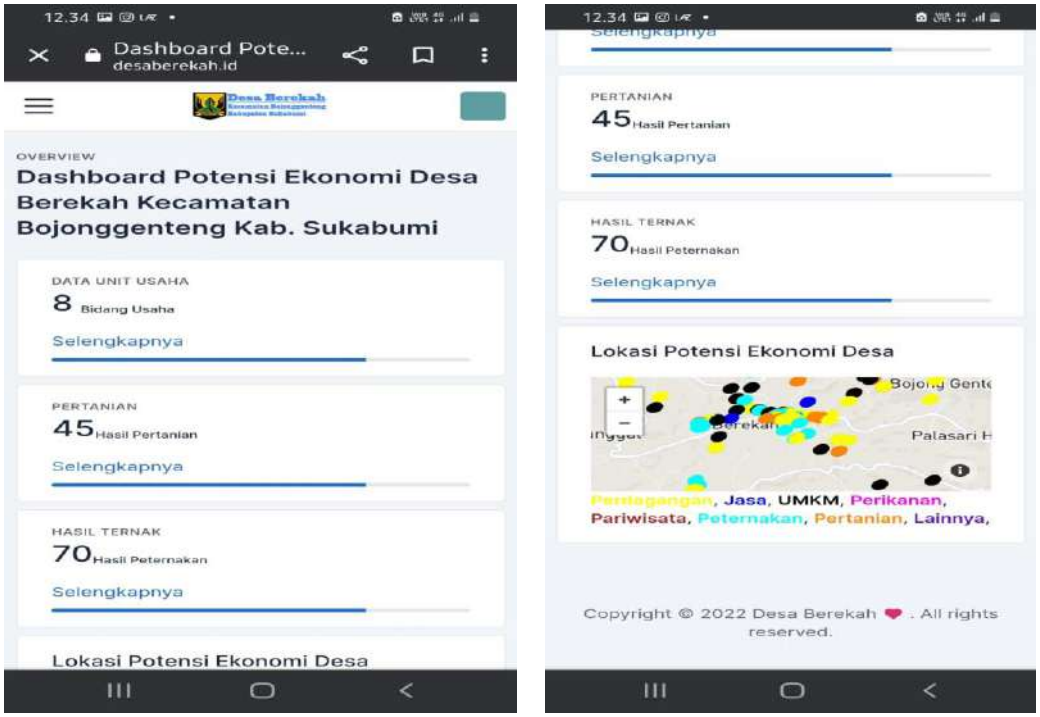

Figure 4. The Economic Potential of Berekah Village

The figure explains the economic potential that exists in Berekah Village from various business fields, namely agriculture, animal husbandry, and other business fields as well as the location of the village's economic potential.

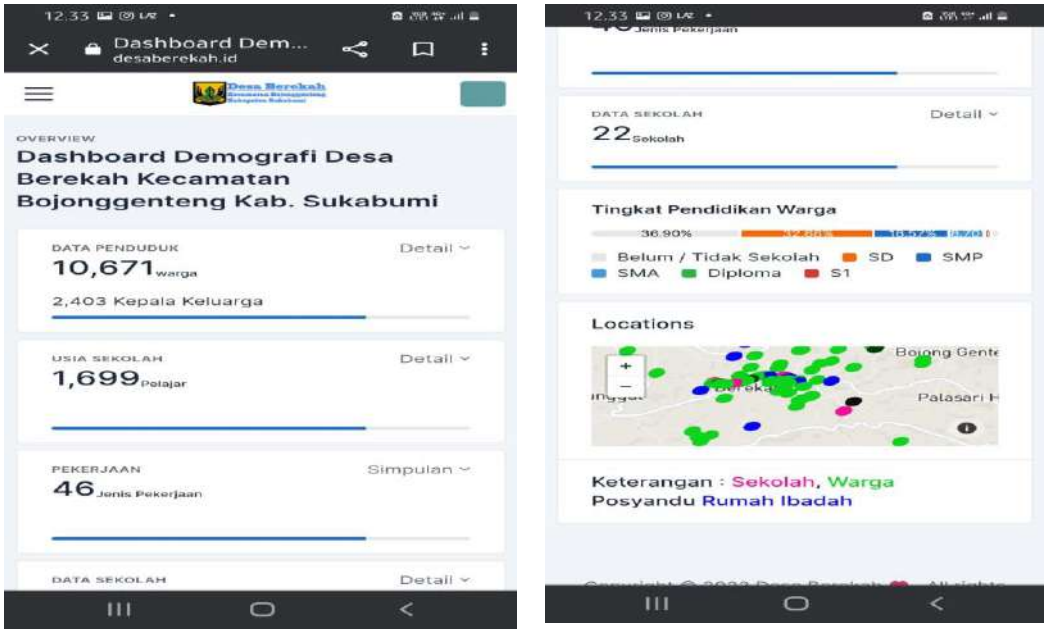

Figure 5. Demographics of Berekah Village

The figure above explains the demographics of Berekah village, namely in the form of population, school age, type of work, school data, education level of its residents, and other information.

CONCLUSION

Based on the research results of the smart village model in improving services, several village problems have been resolved, namely up-to-date village demographic data and community economic potential in the smart village model application in Berekah Village, Bojong Genteng District, Sukabumi Regency. With this smart village application, the community is well served, without having to wait in long and long queues.

With the smart village model system, of course, the Berekah Village government can provide maximum service to the community. It is hoped that this smart village application can serve as an example for other villages, especially villages in Sukabumi Regency, generally villages nationally. And it is hoped that this research can become a reference for future research not only qualitatively, but also quantitatively.

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